Notebook Series -- Notebooks by Edison
Notebook, N-14-09-30

This notebook was used during the period September-October 1914. 1914. It is the third of a four-book series, preceded by N-14-08-07 and continued by N-14-10-04. All of the entries are by Edison, except for some small notations by Sherwood T. (Sam) Moore. The entries pertain primarily to the transfer and printing process involved in disc record manufacture and to the Condensite varnish surfaces applied to record blanks during the process. Included are notes describing transfer and printing results obtained with various experimental varnish compounds, which contained different amounts of phenol, alcohol, "para," "penta," and "6/4." Additional entries relate to experiments by Jonas W. Aylsworth to hasten condensation. Inserted into the book are several loose pages of notes by Edison that tabulate some of the results noted in this book. The notes indicate that Archie D. Hoffman also assisted Edison. The front cover is labeled "Disc = 3." The pages are unnumbered. Approximately 125 pages have been used.

Sept 30 1914

Using raw Benzol + washing it boiling with 2% KOH and ~~got out lot of yellow~~ then precipitated with strong HCl – got out large amount. The water solution was then boiled down to drive off HCl driven off – after thoroughly drying alcohol distilled a considerable quantity of alcohol 6 parts the KOH – Hilton Crystallizing in needles –

Adding Equal % to Reg Var of Acetone Benzol + alcohol. The Percentage of is determined want 6% Acetone 2nd by Benzol –

For July + Aug over 2/3 of good
transfers taken (light) but last
plates flowed Sept 4 —
(Then 3 holidays Labor Day & Sun)

The plates made on 4th
gave 92% good but those
flowed on 8th + up to
date Sept are very bad
65 @ 75 % mostly pull outs

Another change was made
on Holidays used to change
pulling the varnish in
blank powder from pouring
to pouring it in —

Examining the pull outs
in transfer I find very
faint cracks + believe
pull outs start at fine
hair cracks — if so
then the trouble due to
pull outs is due to blank
+ not to varnish, but

Thought this was impossible till I discovered these fine Cracks at every pull & cel — Think veneer dont hold so — Varnish is unequally distributed in powder by pouring it in

Try 2 lots reg Var 903 two bottles dushis — one had some alcohol saturated with ammonia put in & the other equal amount Alcohol no ammonia They did not act much deferent,

Tried 2 with Reg Resin in alcohol saturated with ammonia work as good as Reg & less Bubbles no pores or specks think come off easier

Sept 30/14

996 Reg 903 Var - Except 7.8% of 6/4
" instead of 8% - Resin 16.5
Lot 566 B Room Temp 90 Fah Var Temp 80°
Visco 3.28. Varnish works good, plates look
fine, Varnish thickens after flowed on plates
R

Transfers - Reg Schedule -

Made 302
OK 212

Cracks 34
Pull outs 54 } 90
Bird
Mechanical 2

90%

Reg Var to check 997

Pull out ||||| not fried 2d pass ||||
OK ||||| not fried ||||| R

4 OK Transfers - 8% 6/4
9 pull outs -

30.7%

Rept 30/14

997 Reg 903 Var except 8.2% 6/4
instead of 8%. Room 16.5 free phenol
Lot 567 B Room Temp 93° Var Temp 82°
Viscos 3.47 Varnished flowed freely
Var creep but center coat not too thin -
plates look good

Reg Schedule
316 made
131 OK
185 Rescanned

Cracked 21
Pull outs 164
Burns

41%

Sept 30/14

998 Reg 903 Var Except 8.4% 6/4
instead of 8% Room 16.5 phenol
" Lot 568B Room Temp 95° Var Temp 86°
Visco 3.19 Varnish creeps, not much
patching up - Plates look good

Transfer 324 made
OK 180
Dis 144

Pull out 36 55%
Cracked 107
Mealound 1

Sept 30/14

999 - Reg 903 Var Except 8.6% 6/4
instead of 8% Resin 16.5 phenol
" Lot 569 B Room Temp 98° Var Temp 84°
Visco 3.21 Var dient crisp much
plates look fair, Lots Thin Edges.

Resin -

Transferred 274
OK 157
Dis 117

Pullouts 14
Cracked 77
Mechanical 26

274 | 157.0 (57
130
29 18

Sept 30/14

1000 Rug 903. Vari Except 8-8% 6/4
Reseen 16.15 Radar -
" Lot 570 Room Temp 96° Vari Temp 84°
Yucca 3.15 Vari fleeced freely, Crepe,
Thin edges + few dumples, plates fair

Transfer - 323
OK 214
Dis 109

66

Lifted 1
Pull outs 25
Cracked Vari 83

Sept 30/14

At same time we put in same oven
903 Reg Lot 565 as a check
to the Expts with 6/4 def % —

Sept 30/14

1001 Reg Var 903. Except 9% 6/4
Room 16.5 planed
Lot 571B Room Temp 90° Var Temp 84°
Viscos 3.15 Var flowed freely,
thicker on some parts of plates. Creeps
unevenly — plates fair —

Transfers 312 made 54.5%
OK 170
Dis 142
Pullouts 14
Cracked 128

Transfers
Made 72
OK 42
Pullouts 2
Cracked 28
100

58%

This stage pull outs but
Hardens at a crack
measure —

1002 Req 903 filled and
wag Wm a single bag
in Chain — Resin 16.5 per plant

~~Transfer —~~

~~Insert 96~~ ~~Pull Outs 42~~
~~OK 50~~ ~~Ckd Var 4~~
~~Dis 46~~ ~~46~~
~~52%~~

Transfd 358
OK 232
Dis 126 —

64%

Pull outs 105 —
Ckd Var 21

With Req Var. log transferred holding
at Req 15 min 100 lbs steam 500 lbs pressure
also another lot held 20 min —

Req 15 min 24 plates 16 OK —
6 pull outs 2 Cracked Var

20 min 24 plates 15 OK
8 pull outs
1 Mechanical

100 grms phenol 5 grms 6/4
long glass tube in cork of flask
upright on hot plate,
Does not show any
signs of condensation or thickening
after 60 hours -

100 phenol 10 grms 6/4 after
60 hours thickens some &
gives a Resin -

100 phenol 15 grams 6/4
60 hours is about right
Consistency, very thick
Molasses like & pours all
out OK

It would require 16 to 16½
to produce same result in
10 hours of thick -

100 grms phenol & 20 grms
6/4 fused & event solid in
2½ hours - probably for very
18 to 20 grms 6/4 should be used

Note, If formaldehyde 6% added to a water solution of Paraphenylenediamine It gives a very fine bulky precipitate This if dry does not show the slightest sign of melting or of coming off put in light on the hot plate.

Also this precipitate is insoluble in boiling alcohol —

This reaction may account for Paris's action in Venice —

Its not Sol in Acetone or Benzol — ? ?

If Paraphenylenediamine is dissolved in alcohol formaldehyde does not precipitate anything But when 100 minims Water add the precipitate appears

This proved show that if there really is 22 grms of free phenol in Resin & added we ~~should~~ use up 5.3 grams alone for phenol leaving only 2.7 grms to harden the resin —

Note, This Combination is sol in Hot phenol ? ?

But pouring on dish a very slight sediment separates probably impurities in Paris — after free phenol smoke stops coming from dish I notice sediment redissolves so its OK if it does the business

Here is a Cure - Took pure Phenol put in Bottle 6/4 could get in Hot & by shaking - poured out on butter dish right on hot plate

Poured in 2 dishes, in one put in a little para - none in the other —

Both started smoke being phenol distilling off —

Soon the dish with para started distilling off phenol, & turned color & gummy into a varnish

While the other the phenol all distilled away & left nothing but white crystals of 6/4 in other words

Para in varnish prevents great loss of phenol in oven & hardens plates

When put on hot plate crazing reduction,

Very Good -

This is a very striking & Important Experiment

After 1/2 hour the phenol 6/4 Para is thick cream on hot plate butter dish but dont seem to want to harden Enough, to get more 6/4 in it would be necessary I think to use mixture of pure phenol, phenol with some alcohol in to get Enough 6/4 in

I will try 1/2 phenol & 1/2 alcohol

When 1/2 + 1/2 is tried the Evap of alcohol throws out 6/4 in crystal form & its rig — no para —

Tried Phenol only slight alcohol This also throws out 6/4 when para put in Even worse

Think got too much 6/4 —
No I am mistaken the phenol
itself crystallized out getting cool
by evap of alcohol on putting
right on hot plate goes clear

Both with & without para
when put right on hot plate
phenol distills off —

Another bug with phenol &
but little alcohol —
Para precipitates out,

Also same thing when
formol HCl crystals from
pouring formaldehyde into
alcoholic Para, used
in place of 6/4 —
precipitates out even
worse than cadium
6/4 only used

There is no doubt but with either 6/4
or formol HCl - addition of para preserves
75% of the phenol from evaporating
in little bottles dish right on
hot plate,

6/4 seems more favorable as it
dont precipitate much para
out,

6/4 alone nearly all the phenol 95%
evaporates & escapes condensation
which a pinch of para in the
Duplicate pail saves 75% &
it resinifies —

I note that the formol HCl without
para 1/2 resinifies & dont distill
& resinifies same whereas placing
6/4 phenol alone goes,

I rather think formol HCl is good
without para, perhaps wants
more of it + but it may not be
as good as 6/4 with para —
am weighing out to make definite
experiments —

Oct 1/14

Dutch Chem

by his mag method of determining free phenol in Resin gals

#625	626	627	628
81.4% Resin	83.4	83.5	81.8

With deashing in alkali & precipitating

got 82.1	84.2	84.7	81.6

No 1

25 phenol
5 grms 6/4
250 mlg Para –
20 grms alcohol.

This Resin is lean in bulk than 2 or 3 – & is softer – 2 hardest & equivalent bulk No 2 2nd + No 1 3rd –

I had to use alcohol to get clear solutions

No 2

25 grams phenol
5 " 6/4
1/2 " para.
20 alcohol dissolve hot,
mix easily —

Unlike No 1 more para caused
the phenol to go solid more
quick than 250 mlg in
flask before I was ready
to pour on dish —

This one given a hard
Resin + the largest in
bulk — This is almost
as hard as Rag Hoffer
Resin —

994 — 80.3 Resin 19.7 pure phenol in it.
2.3 phenol added Lot 563 B
8% 6/4 1/2 para 6% Resita
based on actual amount of Resin
1.45 Dekat Al — 3 gorants made

Poured 9/29/14 pm room temp 68°
Var 68° Viscos at 70 5.01
Licked rollers — patch every plate, dimples
breakaways, lines & ripples

Oven — 1 Bubbles 20 — Dimples
30 Cured — Bubbles

Transfers 15 made 7 OK 8 Dis
3 pull outs
5 Ckd Var 46%

995 — 84.6 Resin 15.4 free phenol
6.6 free phenol added —

8% 6/4 ½ para 6% Peola —
Based on actual amount of
Resin 150 Alcohol 3 gals Vars

Flowing — 9/29/14 room temp
88° Var 82° Viscos 5.15 —
Worked like 994 — no better —

OVEN 34 Bubbles Dissolved
Cured 11 — Bubbles —

6 Transfd —
4 OK —
2 Dis —

1 pull out
1 Mechanical 66%

991 — 560 lbs
Req Var (903)

Used resin containing 15.4 free phenol
added 5% phenol 10 gals made
open kettle

Oven — Rubber 5
Unseen 3
Faced 15
} 24 Discards

396 Correct Cubicles

Transfers - 282 made
216 OK
66 Discards

Pull outs - 2
Cracked Var 62
Unchanged 2 76%

Sept 9/29/14 - (Cont)

993- 562 Lot 903-

Resin 19.7 phenol added

5% phenol ?

Hoffman - Visco 5.19 Temp V 78
Thompson 6.00

Oven - Bubbles 9
Uneven 14
Dirt 6
Raised 54
} 83 Dis

cover 7 - 4 hrs

537 Cured

Transfer ~~Over~~ 269 - transfer
215 OK
54 Dis

Pull outs 25
Cracked Var 27
Mechanical 2

79%

No 4

25 phenol
5 6/4
20 alcohol no para

All 1 2 3 4 & 5 in dish on asbestos at 4.45 pm in 5 minutes the phenol in 4 & 5 with para had crystalized out with 6/4 — whereas No 1 2 & 3 with para were clear in 5 minutes after all the Nos 1 to 5 had gone crystalline & dry from Evap of alcohol

No 3

25 phenol
3 3/4 gms 6/4
20 alcohol
1/2 ~~7~~ Para

I now put dishes from asbestos right on the metal of hot plate

No 3 is only one that for first 10 minutes to all liquefied

Phenol is doubling off of alc

It looks like it being due to low 6/4 & high para +

At 5.12 or 27 minutes after putting on 1 2 & 3 are clear while 4 is nearly dry & crystalized & 5 all phenol practically distilled off —

5

25 phenol

3 3/4 6/4

20 alcohol no para

Nos 4 + 5 are hopeless must have para to hold phenol from cooking out in oven

I now take flasks containing Nos 1 to 5 + add 5 grams of water to each

Nos 1 + 2 were solid

when cold No 3 liquid No 4 solid + No 5 liquid

When the 5 grams of water were put in all the solid except 4 became almost instantly liquid + clear phenomenon!

No 4 only lagged, some cry not quite dissolved –

Took all off – 4 + 5 no

1 2 + 3 solid clear look good – No wonder we need para –

at 530 pm Oct 1/14 pour 1 to 5 with 5 grams added

Water [redacted] the mix – butter plates on 1/16 thick [illegible] on hot plate –

All but No 3 went crystalline at 5 45 put right on hot metal –

Not so much smoke of phenol off the water bat.

~~[illegible]~~ Water Expt 1 2 4 3

Clear & resined –

4 crystals & phenol apparently dissolved off – 5 1/2 cry 1/2 liquid

took off – acts about same as of no water, not quite as good, and amount of Resin is less say 20%

No 2 being greatest amount. This shows that Water is not dangerous apparently –

Remember Water was put in after I had poured one set plates + therefore must be equal to 7 grams or 35 gram of water to 100 alcohol.

I now add to the balance of the mixtures in 1 to 5 after having poured out 2 rounds – or about 1/2 I add one gram of Penta which I dissolved out of E I penta by alcohol which was original Rees Penta remanufactured or treated by Hoffman –

The phenomenon about this Expmt is that I cant see any smoke from any it appears as if Penta held phenol. but possibly alcohol has now gone & must have gone crystalline + not clear & water will now

start to go off & will get
Smoke & phenol will
go —
It may be on account of
there is much water in
Alcohol + Resin —.
That the water will
hold back ~~[illegible]~~ phenol
from Evap so rapid
as temp won't rise
above 212 until the gone
& by that time phenol
will be more syrupy &
non Volitile

It clears on all but #4
after Water gone & smoke
is very small compared
to the others, 1 & 2nd
Round,

It certainly looks as
if Penta helped Para
to hold phenol in Varnish

till it got non Volitile

Took 1 2 & 3 off thick resin not
fused — Thicker than Either
Round 1 or 2 — & Best yet
yield slightly better than any —
Even No 4 without para is
a resin but more than 1/2
probably 2/3 has distilled
off — towards end it bubbled pretty,
No 5 is smoking but
unlike the other 2 samples
is clear — Took No 5 off
no resin — just Crystal & oil
left — etc —

3rd Round (Penta) — 1 & 2
hard — #3 soft — Very black

Apparently anything that
will hold phenol from distilling
out of Varnish till it gets to the

Non Volatile state is good—

Paraphenylenediamin is poor, Excellance the best substance its action is wonderful

Next Comes penta. which is only moderate as compared to phenol,

It may also be otherwise beneficial —

Moore Expt No 1 on Transfers —

Reg Var 903 — Lot 565 B

Transfer Schedule
5 Min at 500 lbs instead of the reg 15 min at 500 —

12 Transfers —

Pullouts ||||| ||||| ||| 00%

Horrible pull outs —

Moore # 3

Req -

Req Schedule —
15 min at 500 lbs

Pull outs |||
OK |||| ||||

Evidently our
prev schedule is
old hat,
this is not cause
pull outs

Moore # 2

Req like Moore 1
10 min at 500 lbs

Pull outs |||| ||||
OK |||

Kitten but
better than No 1 Moore -

Oct 1/14

Moore #4

600 plates washed & set aside for 24 hours & 600 plates washed & used right off - Reg 903
Var Lot 559 -

Used right away

Recd 24 hours

Transfd	287	Transfd	288
OK	165	OK	175
Des	119	Des	110

Pull outs	100	Pull outs	100
Cracked Var	11	Cracked Var	10
Mechanical	8		
	119		110

Transfered both day & night

It sent the plates
Evidently that cause pull outs -

Contamination of E Experiments with Condensing phenol -
Recd flasks marked up numbered 6 7 8 9 10 -

No 18 Edison
10 Think

25 grms Phenol
5 " 6/4
250 Milg Para
1½ grms Penta got from Raw Penta by Alcohol after washing E No 1 -

No 6 Edison

25 grams phenol
3 3/4 " 6/4
1 1/2 " Penta -

As there is considerable Resin 75@60% left it shows penta acts exactly as calculated for Para -

Edison No 7

25 grams phenol
5 " 6/4
1 1/2 " Penta -

Couldnt get this to dissolve all in the phenol although very little it would Crystalize out, all the others dissolved to a clear

It wont stand so much 6/4 #6 just stands it & is the limit
Whereas with 1/2 para Everything is fine -

Edison No. 8

25 grams Phenol

3 3/4 " 6/4

1 1/2 " Penta

1/2 " Para

No 9 Edison

25 grams Phenol

5 " 6/4

1 1/2 " Penta

1/2 " para

9-7-10-6-8

Notes, ~~[illegible]~~ 6 7 & 9 + 10 on asbestos 11 pm —

I didn't measure off the amount I put on each plate,

9 10 + 8 right on hot plate dont crisp or smoke + are perfectly clear at 11 12 —

7 is crisping some + crystals in it 6 is crisping slightly smoking (red).

Remember I put no alcohol in the Extract like I had in 1 to 6 —

at 1120 pm —

9 10 + 8 are seeming thick — 8 is the thinest

7 still crystals — 6 clear — no ring.

as I had difficulty to mix 7 + 6 — 7 being impossible

& 9 10 + 8 mixed OK —

Evidently Penta Para causes 6/4 to dissolve good & in their absence 6/4 crystallizes out.

This is another important fact of phenomena;

as I had more trouble with 1st lot with Para to get all the 6/4 to dissolve although Para present than I did with this lot, Evidently Penta helps to dissolve 6/4

Oct 1/14

Took them all off at 1135 pm

I noticed when I was heating this bunch with corks in two of them blew corks out although there was no alcohol — There must be some reaction making vapor or gas — probably alcohol in the paraffin but it was small —

I note that No 6 with no para is the hardest resin while 9 10 + 8 are much softer, that must be due to fact that the 6/4 didn't distil off like it did in No 6. which having much less phenol got a bigger dose of 6/4 + got harder

No 7 is not a resin but a mass of crystals probably 6/4 whereas #9 had as much 6/4 as 7 gives big yield resin

Same as 6, 7 + 9 + 10 — but to remaining material added 10 grms alcohol to each — all clear

8 9 10 7 6 in row

8 is 1st to left — on 12 Midnight on alcohol —

When alcohol is used it creeps badly up to edge of dish — not so when no alcohol except some creep where no para used

At 1207 or 7 min after pouring in dish on asbestos 8 + 9 are resin as well as 10 8 + 9 about same 10 not so much

#6 no rain - a drop on cold glass shows phenol crystals
& #7 is still all crystals
phenol & 6/4 cry

at 12.25 am take off -
8 has no bubbles
9 some
10 the most
7 all cry
6 clear no bubbles

There is doubt about which is 10 as I have 2 #8's

7 all cry & smoking even after take it off

at 2 pm 8 9 & 10 are liquid with the flasks
(12) the remainder not used while 6 & 7 are crystalline solid

Unless Hoffman Rexin itself is hard enough to stand the Reproducer all that it needs is to fire it just a little to stop brittleness —

Think we want to keep our 6/4 low & use 2% para
4 @ 6
& ~~[illegible]~~ of good Penta of
Even quality -
Possibly 7.5 @ 7.6 6/4
with 2 para will do,
Even low we have 2
Experts coming there
with less than. 7.8% 6/4 -
as 7.8 gave 70% good transfer
with only 1/2% Para think
7.4 will do if use 1%
Para

11-12-13 Remarks –
Only #11 was clear
12 & 13 had lots undissolved
Crystals 12 the worst
big sediment,

Evidently para is incompatible
with X – precipitates

after pulling on metal
of hot plate, No 11 has brown
tarry Crystals –

Notwithstanding Crystals
Etc all have formed resins
at 1.35. rather thin –
& apparently all the Crystals
are disappearing – & solution
getting clear,

See next page

On at 1,15 am

E 11

25 phenol
3 3/4 grms of X Crystals made by
adding HCl to b/4 in Alcohol
10 grms Alcohol
yield of resin 6.100 grms

E 12

25 grms phenol
3 3/4 X —— see #11
1/2 grm Para –
10 " Alcohol
yield 6.550

E 13 – 25 grms Phenol
3 3/4 grms of X see #11
yield 7.100 1/2 grm Para
1 1/2 " Penta El.
10 grms alcohol

11-12-13 - Continued,
Considerable smoke coming off 140°.
Evidently X is not worth much for our purposes not as good as 6/4
Naturally additional results off Mesh will get thicker
All clear - We'll let them stay all night & go home —

11 is hardest 12 is softer & 13 little softer than 12 but close shaves apparently 12 has greatest tack

1003 – 574 Lot.
Reg Var Except Room 20.9
5% free phenol – 1
10 gal –

Lot 574 & 13 Room
92° Var 82° Vis 3.47
Wks OK after not counted per
Vain streaks, mottled
plates good –

Transfer 288
OK 139
Discard 149

Pull outs 103
Cracked 46

48%

Oven – Bubbles 9
Uneven 7 } 18
Dirt 1

Comal
none report

1006 – Lot 577 –
Reg Var 7.6% 6/4 mottled
of 8 –

96 made
20 OK

Pull outs 66
Ckd 8
Mech 2

Room 16.5 free
phenol 5.5
½ pana
7.6% 6/4
6% Pants –
125 cal –

21% —

Oven Bubbles 8
Uneven 5
Dirt 1
Ramed 6
20

Full percentage report
Transferred 315
OK 166
Dis 149

Comal Bubbles 438
Uneven 192
52%

Pull outs 118
Cracked Var 29
Mechanical 2

Remarks to date Oct 2/14

1 Its not the Ovens
2 " pressures or schedule
3 " More or less free phenol
4 " More or less 6/4 in relation
" to free phenol -
5 " Not varying temp of mixing or flowing room -
6 = Think should make 10 gals & only Extract Paste by alcohol leaving no phenol -

Oct 2/14

You Have tried a lot of Chemicals to hasten Condensation in Under here conditions the hours at hand is this

%		Hours	Remarks
—	Plain Varnish	93.	
3	Paraphenylenediamin	12	
2	Oxidized "	25	
4	" "	15	
4	Anilin Hydrochloride	25	
2	"	36	
2	Paraphenylenediamin	20	-
4	Phosphato-anilid (Phosphoryl)	18	Very small amount dissolved
4	Benzidin (Base)	15½	only ½ dissolved
4	Ortho Tolidin	22	
4	Methylene-Phenylendiamin	20	only little dissolved
4	Para amido ortho Cresol	19½	
4	Para Anisidin	26½	
4	Toluidin (Base)	37½	
2	Anilin Oil	29½	
2	Succinic Acid	37	
2	Anilin Oxalate	29	
2	Xylidin	30	
4	Betanaphtalamin	39	
4	Parachloroanilin	38	

10/1 14

1007 Export Varnish
10 gal — 2% Para 7.8% 6/4

Resin -
OVEN Bubbles 8
Uneven 8
Dirt 2
Raised 30
Dumpler 1
} 49

Comal
Bubbles 547

Flowed 1st/14 — Rm — Room Temp 90
Varn 94 — Vis 5.20 Varn & Comal
fredy good body plates
look good

OVEN — 590 plates · 57 & 13 left Varn
Top coil. Cut out

Bubbles 8
Uneven 8
Dirt 2
Raised 20
Dumpler 1

Comal 540 —

pull outs at outlet
2 large, very small —
Cracks very small
margin cracks

Transfer. 205 Transferred
150 OK
55 Discards

7/3 %

Pull outs 20
Cracked Varn 32
Defects 3

Varnish Req Different % of 6/4

% 6/4	% OK Tum	Pull Outs	Cracked	
7.6	21	66	8	
7.8	70	54	34	
8 —	73			Req
8.2	41	164	21	
8.4	55	36	107	
8.6	57	77	14	
8.8	50	0	5	12 months
9.0	54	14	128	

Note

				Total free phenol	% OK Turn	Cracked	Pull Outs
991 #	Resin	15.4	5 Extra Phenol	20.4	76	62	2
993 =	"	19.7	"	24.7	79	27	25
1003	"	20.9	"	25.9	29	12	46

Note as phenol goes up
Cracks diminish & pull outs increase

Hoffman well dup all 3 using 2% para instead of 1/2

● 991 + 993 Req 903 Var - 1/2 % para

only 90 - would 200 more

1010 B Check on Sprayed Samples
1010

100 Transfers made
75 OK
25 Dis -

Pull Cracks 18
Ckd Var 7

1010 - Blank Expt. Varnish 1% Para
Sprayed - process of curing

100 Transfers made
78 OK.
22 Dis

18 Pull cracks
4 Cracked

1008

Free phenol up to 25% instead of 22%
Recq amount 1% Paria —
Lot 58013 Room T 88° Vant 84°
Vis 4.32 10 hrs OK Mettler. Vaino Creaks
thickens after flowing — plates slo a liquid)

OOEN — Butler 2
Uneven 122
Dirt 3
Rough 8 } 135 — Council 512 OK

Transfers 216 made
160 OK
56 Discard

Pull outs 39
Cracked 17 74

Hydrochlorethan
does not precip anything
Para or 6/4 cut off
alcohol so it can
be used —

1005 — Lot 5763
~~Bum~~ Reg Var except 7.7 6/4
unleak of 8%

Resin — 16.5 free
Given: Soft Var 16
Buffer 8
unseen 1
Dirt 0

Raised 2
Dumpla 1 } 31

620 plates
Butter 3.97
unseen 192

flowing room 96° Var 82° Vis 3,45
Var thickens on plates after flowing
Mottle, Vain sheaker-plates look good

Transfers made 273
OK 85
Dis 188

Pulls 162
Crades 26 -. 31%

Transfer plates Baked over 7 hour
total 14 hours —

Transfers made 22
OK 10
Dis 12

Pullouts 12 45%

	Insol	
18	31.5	S 4/7/14 F 4-15-14
19	36.3	S 4-17-14 F 4-25-14
20	35.9	S-4-25-14 F 5-5-14
21	16.2	S-5-5-14 F 5-16-14
22 - Spec	4.8	S F 5-7-14
23	17.3	S-5-16-14 F 5-25-14
24	17.7	S 5-25-14 F 6-4-14
25	19.8	S-6-5-14 F 6-13-14
26	24.2	S 6-13-14 F 6-22-14
27	17.6	S-6-22-14 F 7-1-14
28	20.8	S 7-1-14 7-9-14
29	18.2	S-7-9-14 F 7-26-14

Paula Sals Solubability in Alcohol

	Insoluble	
7 =	21.3	Start 1/17/14 finish 1/29/14
8	26.5	Started 1/29/14 finish 2/11/14
9	26.8	S 2/11/14 F 2/21/14
10	21.6	S 2/21/14 F 3/4/14
~~11~~		S F
12	18.9	S 3/4/14 F 3/15/14
13	23.9	S 3/16/14 F 3/19/14
14	22.9	S 3/12/14 F 3/16 "
15	22.6	S 3/19 F 3/29
16	Spec - Still Soluable	S-3/26 14
17	17.8	S 3/30/14 F 4/7/14

30	24.6	S 7-16-14 F 7-22-14
31	18.9	S 7-23-14 7-29 14
32	17.8	S 7-30-14 F 8-5-14
33 —	17.9	S 8-5-14 F 8-8-14
34 —	29.4	S- 8-8-14 8-12-14
35	22 -	S 8-12-14 8-17-14
36 -	24.3	S 8-17-14 8-24-14
37	20.4	S 8-25-14 9-3-14
38 -	21.9	S 9-3-14 9 22-14
39 -	21-3 -	S 9-23-14 Spent 9/22-14 9-26-14
40 -	21.1	S 9-28-14 F 10-3-14
41 -	22.9	S 8-3 —

Our Denatured alcohol is 100 grain 5 wood alcohol —

190 proof or thirdless than 95%

Hoffman Dacp the not cable most 6/4 you can get in our alcohol is 22% we use 8%

Sample Reg Run Oct 1/14 unpacked

903 Van Lot 559 — 842-907
1 3 4 6-7-8 oven 8 hours

Total Treated 5281
OK 3740
Discards 1541

Lift, cracked 1
Pull out 1292
Cracked Van 155
Mechanical 93

70%

70.7 veneer

1008 - Ream up to 25% instead of 22. 1% Ream 16.5 pre phenol

7 hours -
Transfered 312
OK 211
Dis 101 67%

Pull Outs 62
Cracked 39 -

Lot 579 A Room T 92° Var 87
Vis 3.28 Var works good - plates good

1011 - Ream 16.5 2% para
7.9 $\frac{6}{4}$ - 4% of Saponified Pouta
thal oil in alcohol - 3% Lwol -
7 Hours.

Lot 583 B Room 89 Var 78 Vis 345
Var streaks, Olive mottled
Creeps - plates look good

Transfd 306
OK 200
Dis 106 65%

Left Ched 2
" Edge 2
Pull Outs 66
Cracked Var 36 -

1040 parts

1012 – Resin 16.15 free phenol
1% Para 7.8 $\frac{6}{4}$ Mixed alcohol
+ Resin together unfilled in
press. Then added phenol –
$\frac{6}{4}$ para + resin – Resin Vis 1.56
16.15 free P 145 al Var Vis 403 Room T 100
flow room 94 Vis 505
This is Expect to prevent phenol
from developing out bad
stuff from Parts 7 Hour oven

Lot 586 B Room T 94 – Var 84
Vis 505 – Molds Very cracks
plates look good

Transfer	297	Oven	Cond
OK	234	Bubbles 3	Bubbles 159
Dis	63	Unseen 6	Unseen 448
		Dirt 1	
		Burned 6	18
		Dimples 2	
Pull Outs	45		
Cracked	15		

79.8%

Duplicate 1012 B
Resin Vis 2.11 16.6 Resin Al 142 Var Vis 455
Room T 95 – Flowed 10/7/14 Room 85 Vis 500

Transfer	304	Pull Outs	101	53%
OK	162	Ckd	41	
Dis	142			

plates – Molds – Very cracks, breakaways, Then edge plates looked good

1013 – Duplicate of 991 Var
Except 2% Para instead of ½%
Resin 15.2 free phenol

Lot 584 B Room T 94 – Var 80
Vis 4.45 – Theaker after out on
plates looks good –

Transfer	323
OK	248
Dis	75
Pull Outs	46
Cracked	29

76%

1018 - Spec - Lot 591 7 hours
Resin 16.6 freeophenol 1% perm
7.8 6/4 - 10 gal - 8% Penta
#41 Penta -
Room T 92° Var 84° Vis 4 45"
Mottle, Vein streaks, Creeps, thickness on plate - plates look good.

Transfer 100
OK 75
Dis - 25

75%

Pull outs 10
Cracked 15

Oven Bubbles 3
Uneven 2
Raised 30
Dimples 1
} 36 Dis

Comal
Bubbles 337
Uneven 224

1019 Lot 592 -
Resin 16.6% freeop - 1% Perm
7.8% 6/4 - 2% Penta 10 gal

Oven - Bubbles 10
Uneven 8
Dirt 4
Raised 5
Dimples 2
} 29 -

Comal
Bubbles 244
Uneven 368

Transfer - 100 -
OK 72
Dis 28

Pull outs 18
Cracked 10

72%

1020 lot 593 — 4 hours

16.6% phenol in Resin —
2% para — 80% 6/4 —
No Penta — 10 7 ml

Oven Bubbles 2
Uneven 9
Dirt 2
Dimples 2
} 15 Dis

Comal
Bubbles 4
uneven 497
OK 200

Transferred 100
OK 45
Dis 55

45%

Pull outs 46
Cracked 9

982 - 1st one HCl Expt 1/8 1% 903 Vari
Transfer 274
OK 236
Dis 38
86% - (38) Penta

Pull outs #1
Left Ch 4
Ch'd Var 33

982 B HCl. new Penta · new resin
Transfer 5075
OK 2983
Dis 2092
(39) Penta

Left Ch 11
pulls 1830
Ch'd 209
mech 44

58%

982 C only difference is different Resin + new lot penta — #(41) lot penta

HCl Expmt

Room 89° Var 84° Vis 4.40 mallo
Very sticky. Req amount of pinching
the edges not many dimples or breakings
Plates look good

Transfers — 318
OK 292
Dis 26

free release

HCl + 6/4 Compound only little Dol Alcohol quite sol Water

91%

No pull outs
Cracked 26

Oven — Bubbles 1
Uneven 3
Dirt 2
Raised 6
Dimples 2

Comal
Bubbles 462
Uneven 200

Comal — 240 had fine bubbles
396 uneven

981 B+ ✓ No 41 Pentta
FeCl3 Expmt. Only difference between this + old one is different room + new lot Pentta #41 lot Pentta

Room T 90 Van 84 Vis 4.10
Mottle, Vein streaks, not much pebbling
Plates [illegible]

Oven Bubbles	4
Uneven	6
Dirt	6
Raised	6
	22

Comal
Bubbles 272
Uneven 366

Transfers - 303
OK 272
Dis 31

89.7%

Pull out, 4
Cracked Van 27

OVEN = Bubbles 3
Uneven 4
Dirt 2
Raised 19

Comal 333 had few bubbles
272 uneven

All 10 gal lots made in Oven Recipe

1st 981 - FeCl3 - 1/4% 903
Transfer 300
OK 49
Dis 251

Left Old 20
pull out 231

16%

1016 - Lot 587 7 hour oven
Reg 903 - with Double Coaches
old Pentta Ural Hoffman has had for long time - Room 1616 10 gal

Transferred 282
OK 243
Dis 39

86%

Pull Out 9
Cracked 30

OVEN Bubbles 25
Uneven 10
Dirt 3
Raised 7
45

Comal - 563 had few bubbles
no uneven

1018 Resin 166 pre-phenol 1% Para
7.8 6/4 8% Resin -
10 gal Lot 591.

Pentes N° 41

- OVEN Bubbles 3
Uneven 2
Raised 30 } 36
Dimples 1

Combd
Bubbles 337
Uneven 224

Transferred 280
OK 203
Dis 77

72%

Pull Outs 31
Lifted 1
Cracked Van 45

Regulars with 41 Pentes

Transfers 285
OK 224
Dis 61

78%

- Pull Outs 26
Cracked 33
Mechanical 2

1019 – Lot No 592 No 41 Penta –

Resin 16.6 freeze – 1% Para 7.8% 6/4 –

2% Penta.

Over Bubbles 10
Uneven 9
Dirt 4
Pressed 0
Dimples 2
} 29

Comal
Bubbles 244
Uneven 368

Transferred – 306
OK 220
Dis 86

71%

Pull Bricks 59
Ckd Van 27

1024 – Lot 598 – 29 Edwoon
Phenylhydrazin – 3% Para 7.9 6/4
Kept Cold, 10 gal –

Over Bubbles 7
Uneven 14
Dirt 10
Pressed 1
Dimples 19
} 51 Dis

Bubbles 19
Uneven 448
OK 200

Transferred 833
OK 140
Dis 193

42%

Pull Bricks 89
Ckd Van 104

1025 Lot 599 — 30 Edewon
250 wetg glacial polos cased
16.6 Resin — 2 para 7.9 6/4
4% Penta 1% water —
10 gal

Oven — Bubbles 1
Uneven 4
Dirt 2
Raised 2
Dimples 1K
21 Dis —

Bubbles 27
Uneven 409
OK 200

Transferred 316
OK 175
Dis 141

55%

Pull outs 76
Ckd 65

1022 27 Edewon Var Gum Dammar.
~~[illegible]~~ —
16.6 Resin free p — 2% Para 7.9 6/4
3% gum mixed gum Dammar
with alcohol & afterwards
add balance alcohol —
10 gal water in open No Penta.

Oven Uneven 5
Dirt 1
Raised 2 8 dis

Bubbles 13
Uneven 469
OK 200

Transferred 340
OK 288
Dis 58

84%

Pull Outs 9
Cracked 43.

1021 – Σ 2% Alpha Naphthol

Resin 16.6 2% Para 7.9 6/4
2% Alpha Naphthol
10 gals in Open

OOEW Unknown 7
Removed 2 } 10 Ds
Dimples 1

Comml
627 Unknown

Transfd 314
OK 187
Ds 127

59%

Pullouts 93
Ckd Var 34

Reg Var made in open
(903'V)

Transfd – 348
OK 285
Ds 63

81%

Pullouts 54
Ckd Var 7
Machined 2

1020 – 16.6 free P in Resin – 2% Para
8% 6/4 – NO penta –
10 gal in Open Mixer

716 plates
Comml

OOEW: Bubbles 2
Unknown 9
Dent 2
Dimples 2
} 15

Unknown 497
Bubbles 4
OK 200

Transferred 350
OK 208
Ds 142

59%

Pullouts 82
Ckd Var 60

1032 – 16.6 Resin 7.9 6/4
1/4% Phenylhydrazine –

Transfd 100
OK 17
Ds 83

17%

Ckd Left. 10
Pullouts 7
Cracked 66

1021 – Σ 27. Alpha Naphtol

Resin 16.6 2% Para 7.9 6/4
2% Alpha Naphtol –
10 gals in Open

Open Unknown 7
Burned 2 } 10 Ds
Dimples 1

Counted
627 Unknown

Transfd 314
OK 187
Ds 127

59%

Pullouts 93
Ckd Var 34

Reg Var made in open
(903'V)

Transfd – 348
OK 285
Ds 63

81%

Pullouts 54
Ckd Var 7
Mechanical 2

1020 – 16.6 free P in Resin – 2% Para
8% 6/4 – NO penta –
10 gal in Open mixer

Open – Bubbles 2
Unknown 9
Dent 2
Dimples 2 } 15

716 plates
Counted
Unknown 497
Bubbles 4
OK 200

Transferred 350
OK 208
Ds 142

59%

Pullouts 82
Ckd Var 60

1032 – 16.6 Resin 7.9 6/4
1/4% Phenylhydrazine –

Transfd 100
OK 17
Ds 83

17%

Ckd Left. 10
Pullouts 7
Crushed 66

1029 Reg Resin 16.6 Reg
Except 4% Penta #41

OOEn – Bubbles 7
Uneven 8
Dirt 6
Reamed 5
Dimples 2
} 23 Dis

Comal
Bubbles 577

Transfers 288
OK 189
Dis 99

65%

Pulls 47
Ckd Vars 52

1030 Resin 16.6 7.9 6/4 –
1/2% Glacial phos acid –
no penta – dissolve 6/4 in al-
then add glacial – don't clean up.

OOEn – Bubbles 10
Dirt 3
Dimples 7
} 20 Dis

Comal
Bubbles 695

Transfers 349
OK 50
Dis 299.

Pulls 48
Birds 4

14%

Cracked 194
Lefts Cracked 18
" Cracked Edge 35

1023 – 28 Edison
16.6 Room 2% Para 7.9 6/4 2% Penta

41 penta,

52%

Transfer 296
OK 176
Dis 120

Over Bubbles 5 Raised 2
Unseen 10 Dimples 1 } 18 Dis.

Pull outs 32
Cracked 88

Cowel
Bubbles 63
Unseen 327
OK 200

1026 31 Edison – 16.6 Room 2 Para
7.9 6/4 4 penta 3% Water.

41 Penta

Transfer – 308
OK 173
Dis 135

56%

Pull Outs 54
Ckd 81

Over – Bubbles 4
Unseen 4
Dirt 3
Raised 5
Dimples 7
Chipped 1 } 24 Dis

Cowel
Bubbles 22
Unseen 412
OK 200

1027 32 Edison 16.6 Room 2 para
7.9 6/4 4 penta (41) 3% ammonia –
Open mixing

Over
Bubbles 3
Unseen 13
Dirt 10
Raised 7
Dimples 9 } 42 dis

Cowel
Bubbles 24
Unseen 579

Transfer 302
OK 217

71%

Pulls 65
Ckd 20

~~1031~~

1031 1616 Resin 7.9 6/4 077
Glacial phos acid - Dissolve 6/4
in Alcohol first then make paste up
with small amount of Alc - then add
Ures to 6/4 No Pentin -

Obs - Bubbles 2.
Unseen 28
Dent 3
Passed 106

539 Consol

Transfd 188
OK 28
Dis 166

11%

Lifts Ckd 18
Lifts Ckd 16
Pulls Outs 26
Ckd Var 106

Lowestoft

Record

Phos Combination watch 6/4

Transfd Oct 6th -

Regular Today

903 Var 40 pentin

Transfd 2898 Made 6 eq 6 bl mixer
OK 2374
Dis 524

Lifts Ckd 4
Pullouts 474
Ckd Var 43
Mechanical 3

85% OK

Reg Made Oct 1 = 40 pentin.
Open mixer -

10 gal

Transfd 302
OK 173
Dis 129

57% —

Pulls 116
Ckd 4

Oct 8

1034 – Lot 613 – 16.6 Room 7.9 6/4
1% Chloride Ammonia
No paraa or Penta 7 hour – 613B

Flowing room-Temp 88° Var 80. Visco 2.45
Color Lemon, plates have good body
Matte – Plates look good.
OVEN
Bubbles 10
Uneven 4
Dirt 8
Raised 13
Dumples 6

Uneven 647
Patched 51

Transfd 316
OK 256
Dis 60.

Pullouts 38
Cracked Var 21

81%

Print. 12 inspected
4 Discarded – 3 ckd in music 1 – feedline
8 ok

725

Prints 244
Dis 67
OK 177

Knocks 14
Scratch 1
Holes 7
Ckd Cracks 1
Rough Surf 5

Crooked 6
feedline Crack 22
poor print 6
White Spots 5

Oct 8th 1914

1035 Lot 614 16.6 Room 7.9 6/4
3/4% Chloride Ammonia – Lot 614B

Flowing Room T 90 Var 84 Visco 2.50
Milled, lemon color good body plates look good.

Plate Bubbles 7

OVEN – 720 Plates 7 Hour Cycle
Uneven 629
Patched 39 24 over

Uneven 44
Dirt 18
Dumples 3
Charred 1
76

Transferred 336
OK 247
Dis. 89

Pull outs 67
Cracked 22

Prints 66%

73%

Print 12 Inspected
6 Discarded
– 6 OK
1 Knock
3 Holes
1 feedline OK 1 cracked
50%

Reg Oct 9th

Transfd 120
OK 93
Dis 27

Prints 235
Dis 80
OK 155

Knox 22
Cracked 3
Holes 8
Rundout 1
Roughs 2
Crooked 4
Feedline 23
Poor print 17

1035
66%

77%

Pullouts 17
Ckd Var 10

1036 - Lot 615 16.6 Resin. 7.9 $\frac{6}{4}$ -
1/2% Chloride of ammonia -

Flowing Room Temp 90 Var 86 Visco 2.42
Lemon color, plates look good -

	Dio -	Cowel
Oven -	Bubbles 1	Bubbles 48
	Uneven 13	Uneven 514
	Dirt 7	Patched 135
	Raised 1	
	Dimples 5	
	27	

Transferred - 349
OK 284
Dio 65

Cooked Center	9	
Lifted	1	81%
Pull.	41	
Cracked	14	

1036

Print 272 — Knox 12
Dio 70 — Cracked 3
OK 200 - Run Crack 6
White Spot 1
S Spot 1
Holes 11
Cracked 8
Feed line Cracks 28

73.5

1037 16.6 - 7.9 $\frac{6}{4}$
1% Para 3% Gum Sandarac - dissolved Sandarac in Alcohol first -

Flowing room Room T 98 Var 81 Vis 3.24
Color green, Mottled, Varn streaks
not much patching. Plates look good

1040 - 16.6 Rear 7.9 6/4 - 1/8 Hydrochloric
+ 90% Alcohol -

Lot 620 New 6/4

Coral
Bubbles 498
Uneven 208

OVEN - Bubbles 5
Uneven 15
Dent 9
Dimples 33
} 62 Dis

Transfer 349
OK 188
Dis 161

Pulls 90
Ckd Var 71

54.5%

1038 16.6 Rear 7.9 6/4 - 1/8 HCP.
Req 95% al - #2 Lot of 6/4 new

Lot 618 1 Para,

716 pcs
Bubbles 359
Uneven 340

OVEN Bubbles 6
Dent 2
Ramed 2
Dimples 7
} 17

Transfer 322
OK 255
dis 67

Pulls 40
Ckd 27

79%

1039 Resin 16.6 Drip of 1038
Except ~~no~~ no para
Lot 619 Mew 6/4 #2 6/4

Oven - Bubbles 2
Uneven 4
Dirt 5
Dimples 8
} 19 Dis

Bubbles 521
Uneven 200

Transfer 860
OK 242
Dis 118

67%

Pulls 75
Ckd 43

1041 - 16.6 Resin freeflowed 7.9 6/4
1 3/4 Chloride Ammonia
95% Alcohol
Lot 621 — of No 2 6/4

Oven - Bubbles 2 Cracked 2
Uneven 18
Dirt 5
Raised 4
Dimples 19

Cured
OK 200
Uneven 323
pitched 77

Transfer 300
OK 217
Dis 83

72%

Pulls 56
Ckd 27

1037 – 16.6 Resin – 1% Para 7.9 6/4
3% Sandarac in alkohol funct.

Flowing room Temp 98° Vis 81 Vis 3.24
Color green Mellie, Varne thinner
Not much polishing Plates look good

Oven
Bubbles 0
Uneven 4
Dust 3 Insp 635 ok 91.4%
Raised 29
Dimples 19 55

Transferred 317
OK 314
Dis 3

Pull outs 00
Ckd 1
Mechanical 2

DONT STAND WEAR TEST

Note no Bubbles

99.53%

Prints 314 tested.

Knocks 23
Cracks 5
Holes 2
Run Outs 8
Scratched 1

Rough surface 4
Cracked at Edge 1
Cracked 6
Feed line Crack 21
Poor prints 5
White Spots 4

88.86% of the prints taken out

74%

Total 80
Passed 234

No 2 6/4 Hereafter will last 2 weeks

1049 Dup of 1037 except 1/2% Para

Transferred 294
OK 281
Dis 13

95%

5 stuck to plate
Cracked Vis 10
Lift ckd 3

Oven Bubbles 7
Dust 1
Raised 115

Coved
Bubbles 590

#2 6/4

1050 - Dup of 1037

OVEN -
Bubbles 9
Dirt 3
Raised 82
Dumpless 1

Coned
Bubbles 570

Transfd 277
OK 258
Dis 19

98%

Cracked Vase 19

4 shick 20 free release 907 blanks 4 req [illegible]
flowed 10/12/14 Lot 632 B. Oven 7 -

1051 - 4 Sandrac, 7.9 6/4 #2
1 para -

OVEN Bubbles 6
Dirt 3
Raised 60
69

Coned
Bubbles 621

Transfer - 294
OK 285
Dis 9

96%

Chd Vas 9 -

THIS WEARS WORSE THAN 2% of 1052.

1052 2% Sandarach 7.9 #2 6/4
1 para

Oven Bubbles 15 Comal
Dirt 4
Raised 5 Bubbles 464
Dumpers 2

Transfd 239
OK 216
Dis 13

Cracked Varn 11
pullout 1
Mechanical 1

80 Times Only shown
Slight Wedge, compared
to 4% Sand think 1%

94%

worst shown much funny

Oct 13/14
Reg runs
Transferd 100
OK 78 78%
Dis 22

Pullouts 22 –

1043 – Lot 624 1616 Room 7.7 6/4
1% Chloride Ammonia –
Reg Cleaned

Oven Bubbles 4 720 plates
Unevn 8 Comal
Dirt 4 Bubbles 12
Dumpers 29 Uneven 471
Polished 192

Transfer 330
OK 251 76%
Dis 79

Pullouts 62
Cracks 17

1044 – Lot 625 – 8% 6/4 –
1% Chloride Ammonia –
Reg cleaned

714 plates

Oven = Bubbles 1
Uneven 15
Dirt 7
Raised 1
Dimples 19

Coated
Uneven 473
Polished 198

Transferred 100
OK 72
Dis 28

72%

Pull Outs 17
Cracked Var 11

1047 Lot 628 Recm 16.1 7.9 6/4
1% Chloride Ammonia –

Transfer 300
OK 235
Dis 65

77%

Pull Outs 37
Cracked 31

1042 · Lot 622 Resen 16.6 · 7.9 6/4

2.55 % Chloride Ammonia —
90 % Alcohol —

616 plates

Oven Bubbles 2
Uneven 3
Dust 3
Raised 2
Dimples 2
} 12

Uneven 378
plated 226

1061.

10 gal - 8. 6/4

2 1/8 % Dragons Blood, alcohol filtered
1 % Para

695 pieces

Green Bubbles 5
Dust 4
Raised 3
Dimples 3
} 15

Coated
Bubbles 680

Transfer 339
OK 203
Dis 136

59 %

Pull out 55
Ckd 81
Mechanical —

50 % stock to plates —

1062 10 gal 8 6/4

3% Elemi fetter Alcohol
1% Para

670 plates
Bubbles + Uneven 443
used at night 200

Oven Bubbles 13
Uneven 12
Dirt 2
Dimples 4
} 31

Transfer 322
OK 236
Dis 86

Pull outs 15
Cracks 66

73%

50% stuck to plates

Very few bubbles on plates
Scope none –
Transfers very fine – [illegible]
Color dark and very bright transfers

Printed 60
OK 55
Dis 5

Ckd 3 – feed line –
Poor P 2

91%

1063 10 gal 8 6/4

1% Para
1.9% Olibanium fetter Alcohol

684 plates

Bubbles + Uneven 408
Transfer at night 200

Oven Bubbles 14
Uneven 40
Dirt 3
Raised 2
Cracked 3
Dimples 14
} 76

Transfer 304
OK 191
Dis 113

62%

Pull outs 13
Cracked 99
Mechanical 1

7 Hour Oven Lot 6413

1055 16.1 Resin - 1 para 8.8 6/4
3% Sandarac 147 cel

Comet
Bubbles 525

Oven Bubbles 4
Dirt 1
Raised 219 } 225 Dis -
Dimple 1

Old Sandarac

Transfer 250 Cracked 2
OK 248
99.2%

Surface test show that it is as good as regular, Moore thinks it blade leaves than regular
Dont Cut after 50 runs on music
of 2 records tested 6 with lower
Count run only - 5.
Of 2 Reg records tested
1 had Rich cut - 40%

Machine test
112 OK
33 Dis -
13 Crackle 3 white
spot 7 Holes 2 Ck.
8 feed Lumps
Discarded 1

Prints - 133
OK 119
Dis 14

Marque OK 1
Feed lum OK 13
14

1 - Wear test 100 OK no wear
2 Records 50 time show slight wear

89.4

1054 16.1 Resin 1% Para
8% 6/4 -
3% Sandarac 147 cel

Comet
Bubbles 487

Oven Bubbles 22
Uneven 28
Dirt 11 } Dis 193
Raised 127
Dimple 5

Transferred 237
OK 236
Dis 1

99%

Cracked Vac 1 -

Surface test of prints show no worse but surface cracks - of 2 records tested 1 had Cracks - Evidently 8% 6/4 not enough when 3% sandarac used

Record Cuts 8 6/4 is not Enough -

Prints 174 Cracked 9
OK 159 Poor pt 6
Dis 15 Eye Dimpling

91% NG

Discarded Chem

1053. 16:1 Resin 1/2 para
7.9 6/4
1% Chloride ammonia
147 AC

Oven Bubbles 5
Uneven 5
Dirt 11
Raised 36
} 57 Dis

Cond
Bubbles 641

1056 16:1 Resin 1 para
8:1 6/4 - 3% Dandruff
147 Alcohol

Oven Bubbles 11
Uneven 17
Dirt 8
Raised 28
Dumpy 1
} 65
91% ok 200 -

Cond
451

Transfers 326
OK 319
Dis 7

97%

Cracked Vans 7

250 Turns wear only little

Printed 60
OK 45
Dis 15
fused lumps 15
75% Eye Impaired

Oct 16 - Regular

Transfd 100
OK 93
Dis 7

93%

Pull out 6
Ckd 1

1057 16.1 Resin - 1% Para
8.2 6/4
3% Sandarac -
147 blocked

OVEN
Bubbles 12
Uneven 21
Raised 32
Dimples 3
Dirt 6

Coved
90% Bubbles 453
Uneven 200

Transfer 326
OK 323
Dis 3

99%

Cracked Var 1

250 Times, only always little rough OK

Printed 60
OK 55
Dis 5

91%

Cracked 5 feed line - Eye Inspection

1058 16.1 - 1% Para
8.4 6/4 -
3% Sandarac -
147 blocked

Transfd - 294
OK 293
Dis 1

99

Mechanical defect 1

Prints 221
OK 216
Dis 5

Feed Lines 3
Poor Prints 5

Eye inspection

97.50%

1059 - 161 Resin 1 para
8 6/4 -
1% Sandarac -
147 cd Cracked

Cond'

Open - Bubbles 18
Uneven 18
Dirt 9
Ranced 2
Dimples 16
} 16

Bubbles 276
Uneven 168
OK 200
644
16
660

97.6%

Transfd 321
OK 309
Dis 12

96%

Cracked Van 12

Printed 242
OK 234 -
Regrinded 8
} Eyes inspection

96%

4 feed time cracks
4 poor presses

1060 161 Resin 1/2% Perma
8, 6/4 —
1% Sandarac —
147 cd Cracked —

Open Bubbles 14
Uneven 22
Dirt 17
Ranced 14
Dimples 7
Transfd 300 74
OK 283
Dis 17

94.2%

Cond -
Bubbles 406
Uneven 200
606
74
680

Cracked 17 -
243 times only show moderate cocoa

Printed 206
Regrinded 6
OK 200
} Eyes inspection

97%

Oct 15 Req
Transfd 100
OK 76
Dis 24

pullout 16
Ckd Van 8

76%

1064 Dup of 1055.

739 plates

OVER- Bubbles 23
Uneven 12
Dirt 12
Raised 16
Dimples 6
} 69

Bubbles + Uneven 356
Uneven 113
69
538

Note 1st 1055 was with old Sandarac on last 30 years
219 raised in oven

Transfer 334
OK 334

100%

Prints - 260
OK 254
Dis 6

97.7

Feed line Cracks 5
Cracked 1

1065 Dup of 1055 but use 1/2% Para

Transfers 276
OK 275

99%

Mechanical 1

Printed 213
OK 213

Eye Inspection only

100

1066 - Dup of 1055 1%
para with 1/8%
Dragon blood — 8.8 6/4

670 plates

Oven - Bubbles 14
Uneven 7
Dirt 2
Raised 100
Dimples 4
} 127

Common
Bubbles 343 + uneven
Transf Dimpled 2.00

Transfer 271
OK 262
Dis 9

96% -

Cracked 4

Mechanical 5

Printed 188
Repeated 4
OK 184
} Eye Inspection

3 ckd
1 poor print.

97%

Crit

1067 Dup of 1052
2% Acetamide 8.6 6/4

1% Peroxide -
Oven - Bubbles 8
Dirt 11
Raised 10
Dimples 8

Transfers 338
OK 331

97%

Cooked Center 3
Cracked 2
Mechanical 2

Print 60
OK 52
Dis 8

Feathered 8

86%

Oct 14/14

#1058 - 645 Lot 16.1 resin
1% Para 8.4 of 6/4
3% Sandarac

662 plates

Comed
Bubbles 389
Uneven 200
589
73
662

OVEN
Bubbles 23
Uneven 16
Dirt 18
Ramed 14
Dumpled 7
73

89%

Transfers - 294
OK 293
Dis 1

99%

Cracked 1

1045 - Lot 626 Resin 16.6 7.8 6/4
1% Chl Ammonium

700 plates

Comed
Uneven 534
Plated 125
659

OVEN Bubbles 3
Uneven 19
Dirt 18
Ramed 6
Dumpled 12

Transfer 229
OK 177
Dis 52

77%

Pull outs 40
Ckd 12

1046 – Resin 15.0 S 7.9 6/4
1% Chloride Ammonia

Cond 724 plus

Oven Bubbles 9
Thin Edge 17 Uneven 492
Uneven 14 Peeled 128
Dirt 5
Raised 6
Dimples 53
104

Transferred 210
OK 147 70% –
Dis 63

Pull Out 50
Ckd 15

1048 Resin 17.4 7.9 6/4
1% Chloride Ammonia

733 plus
Cond

Oven Thin Edge 5
Bubbles 7
Uneven 17 Uneven 625
Dirt 3 Peeled 37
Raised 2
Dimples 37
71

Transferred 331
OK 177 55%
Dis 154

Pull Outs 122
Ckd 32

1068 2% of Clear resin Extracted from Sandarac by Benzol
1% Para. 8.4 6/4

Oven - Bubbles 10
Uneven 19
Dirt 11
Raised 18
Dimples 17

Transferred 304
OK 299
Dis 5 98%

Cracked 1
Cooked Center 3
Marked - 1

Prints 60
OK 60 100%
Eye inspection

1069 - White residue of Sandarac not solin Benzol - 2%
1% Para 8.4 6/4 -

Oven - Bubbles 23
Dirt 10
Dimples 4
Raised 42

Transfer 100
OK 98 98%
Dis 2

Cracked 2

Prints - 60
OK 49
Dis 11 81%

1070 - 2% Sandarac 1%
Para 8.4 6/4
1/2% Nigrosine WNS to Color

1071 Var Resin 16.1 1% Para 8.2 6/4
1 Sandarac

10-

1072 Var same as 1071 with 1/8%
Nigrosine -

1074 Var 16.1 1% Para 8.4 6/4
1% Sand

1075 - Var same as 1074 with
1/8 % Hydraccum

1076 - Recu 15.7 1% Para 8.6, 6.4
1% Para

1070 Var Recu 16.1 1% Para
8.4 % 6.4 - 2% Sandemac
1/2 % Hydraccum

[ITEMS(S) FOUND IN BOOK]

1060	50	2160	No signs wear
Req	50	"	no signs wear
1060	100	"	Just notice white shade but OK
Req	100	"	note few hills has polish peeled OK
1066	50	4027	OK
Req	50	"	OK
1066	100	"	OK shade of cut on Central hills
Req	100	"	ditto.

[ITEMS(S) FOUND IN BOOK]

1059	50	24949	OK
Req	50	"	OK
1059	100	"	Polution from kiln out
Req	100	"	ditto
1059	250	"	Very little increase of increase over 100
1058	50	38333	Notice shade of white
Req	50		" " "

[ITEMS(S) FOUND IN BOOK]

		Speaker	
1065	50	14959	Shows faint tendency scrape polish or a few traffs
Req	50	"	About same shade better
1065	100	"	Polish very little heat but traffs are cut rather bad and a piece of polish pulled off - not OK
Req	100	"	None to compare
1065	50	38536	No white OK
Req	50	"	No white OK
1065	100	"	Shows no white but slight destruction of polish on traffs
Req			None needed

[ITEMS(S) FOUND IN BOOK]

1064	50	38333	Can't see any wear
Req	50	"	About same
1064	100	"	Wear noticeable Too Much micro shows only surface polish gone on uphill of big [illegible] — no hill & bottom
1064	50	33853	White shows too much
Req	50	"	"
1064	100	"	Very white + NG wears not cut only polish wears off probably due to lack of polish
1066	50	19399	no signs wear
Req	50	"	no signs wear
1066	100	"	No signs wear
Req	100	"	No signs wear

[ITEMS(S) FOUND IN BOOK]

No	Para	Sandrac	G/4	Bubbles	Uneven	Dirt	Dimples	% OK Trans	Rancid	Bubbles	Uneven	OK	Cracks	Mechanical	No Trans	Scuffs	Stuck	Pull Tab	% OK Prints	
1068	1	2	8.4	10	19	11	17	99	18				1		100				100	
1069	1	2	8.4	23		10	4	98	42				2		100				81	

[ITEMS(S) FOUND IN BOOK]

	Para	Sample	6/4	Bubb	Uneven	Dirt	Trans	Dimple	% OK Fr	Bubbles	Uneven	OK	Trans Cracked	Mechanic	Number Trans	Late	Stuck	Eyeg Printing	Eyeg
037	1	3	7.9	0	4	3	29	19	99.5	635		—	1	2	317				
048	½	3	7.9	7		7	115		95	590			10		294	3	5		
050	1	3	7.9	9		3	82	1	93	570			19		277		4		
051	1	4	7.9	6		3	60		96	621			9		294				
052	1	2	7.9	15		4	5	2	94	464			11	1	239				
055	1	3	8.8	4		1	219	1	99.2	525			2		250			89.4	
054	1	3	8	22	28	11	127	5	99	487			1		250			Cut 91	
056	1	3	8.1	11	17	3	28	1	96	451		200	4		326			75	
057	1	3	8.2	12	21	6	32	3	99	453	200		1		321			91	
058	1	3	8.4	23	16	13	14	7		389	200							97.5	
059	1	1	8	18	18	9	2	16	96	276	168	200	12		321			96	
060	½	1	8	14	22	17	14	7	94	406	200		17		300			97	
064	1	3	8.8	23	12	12	16	6	100	356	113				100			97.7	
065	½	3	8.8	11	13	6	75		99	389	182							100	
066	1	3	8.8	14	7	2	100	4	95	543			3	2	100			97	
067	1	2	8.6	8		11	10	8	97	688			2		100			86	

Wear 100

are Cut

are Cut

Underwear

15

Paper

Dragon